Please substitute the following amended claims for corresponding claims previously presented. A copy of the amended claims showing current revisions is attached.

A2

3. An optical device as claimed in claim 1, wherein the two-dimensional array is in a plane parallel to the active layer and extends to a depth comparable to that of the active layer.

4. An optical device as claimed in claim 1, wherein the individual elements are holes.

A3

7. An optical device, as claimed in claim 4, wherein the holes extend to a depth comparable to that of the active layer in a direction that is perpendicular to the plane parallel to the active layer.

8. An optical device, as claimed in claim 4, wherein the holes extend to a depth comparable to that of the active layer in a direction that is not perpendicular to the plane parallel to the active layer.

9. An optical device, as claimed in claim 4, wherein the holes are regions of different refractive index to that of the device structure.

10. An optical device, as claimed in claim 4, wherein the holes are regions of different gain or loss to that of the device structure.

11. An optical device, as claimed in claim 3, wherein the distributed reflector does not pierce the active region.

A3

12. An optical device, as claimed in claim 3, wherein the distributed reflector partially pierces the active region.

13. An optical device, as claimed in claim 3, wherein the distributed reflector fully pierces the active region.

14. An optical device, as claimed in claim 1, wherein the distributed reflector is within the device.

A4

17. An optical device as claimed in claim 1, with means for varying the electrical bias or biases applied to the device to obtain efficient optical emission in single wavelength operation.

A5

19. An optical device, as claimed in claim 1, which is integrated with separate amplifying, absorbing or passive sections.

A6

21. An optical device, as claimed in claim 1, with means for being pulsed